Communicable Disease UPDATE

Newsletter of the Bureau of Communicable Disease Control, Massachusetts Department of Public Health Vol. 11, No.4 Fall 2003

Why Report Infectious Disease? A Few Good Reasons

We are all being asked to do more with fewer resources. Unfortunately, infectious diseases keep occurring, demanding a response with appropriate control and prevention measures. Last year alone, over 25,000 infectious disease reports were received at the Massachusetts Department of Public Health (MDPH). As we move toward electronic reporting we expect this number to increase greatly, placing bigger burdens on both state and local public health resources. Of course, not all of these reports demand immediate action, but there are many that will require rapid and intensive follow-up at the local level.

Here are some reasons why prompt reporting of infectious disease cases is essential:

Disease does not respect geographical boundaries. One seemingly innocuous case of diarrheal illness in your town or health center may turn out to be a puzzle piece in a statewide or nationwide outbreak. For example, in 1992, when cases of *E. coli* O157:H7 infection were found to be associated with fast food hamburgers in the Northwest, rapid identification of the outbreak led to the recall of 272,672 implicated hamburger patties, preventing more infections and likely saving lives.

Reporting helps stop outbreaks. When food served at different Massachusetts' weddings caused clusters of gastrointestinal illness among guests in April, 2002, foodborne illness complaints and prompt follow-up allowed the swift identification of a common food item consumed at the weddings. Due to the action of local boards of health, control measures were implemented and leftover food items discarded. MDPH has a Working Group on Foodborne Illness that meets on a weekly basis. Foodborne illness complaints can be called in to the Division of Food and Drugs at 617-983-6712 or the Division of Epidemiology and Immunization at 617-983-6800.

A phone call can make the difference. While diseases should be reported within 24 hours of their detection and may be reported by fax or mail, certain diseases require immediate notification via a phone call to the MDPH. Those diseases that require urgent case investigation and follow-up, such as acute hepatitis A, anthrax, meningitis caused by *Neisseria meningitidis*, botulism, and plague, must be reported to the

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Availability of State-Supplied Vaccine for Adults

Due to funding reductions, MDPH is suspending distribution of most vaccines for adults (including high risk groups and those entering college). The vaccines affected are:

- Hepatitis B (adult formulation)
- Pneumococcal polysaccharide (PPV23)
- Measles, mumps, rubella (MMR)
- Varicella
- Hepatitis A (adult formulation)

MDPH will continue to provide vaccines as needed for outbreak control purposes.

MDPH will **continue** to provide state-manufactured tetanus-diphtheria (Td) vaccine to all providers in Massachusetts. State-supplied pneumococcal polysaccharide vaccine will be available until current inventories are depleted, sometime this fall.

Because of contributions from health plans in Massachusetts, MDPH expects to distribute approximately the same number of doses of flu vaccine to both public and private providers as was distributed last year.

As in previous years, however, state-supplied influenza vaccine will not be sufficient to meet all the demand for flu vaccine in the Commonwealth. Providers are encouraged to purchase additional vaccine for their patients and staff. Inactivated influenza vaccine is available for purchase from the following manufacturers:

Aventis 800-822-2463

General Injectable and Vaccine (Medeva) 800-521-7468

If you have questions about state-supplied flu vaccine, please contact the MDPH Vaccine Management Unit at 617-983-6828.

Inside

Epidemiology

Vaccinating Wildlife Against Rabies

Terrestrial rabies first entered Massachusetts in September 1992 and within a few years raccoon rabies had spread throughout the state. In 1993, funds were designated for the establishment of the Cape Cod Oral Rabies Vaccination Program (CCORVP) to create a barrier of vaccinated raccoons to prevent the spread of rabies to Cape Cod. Cape Cod was chosen as the site for this project because of the natural barrier created by the Cape Cod Canal. To date, the barrier of vaccinated raccoons in the southeastern communities near the canal has held—the program has successfully prevented rabies from crossing the Canal and spreading throughout the Cape.

The goals of the CCORVP are:

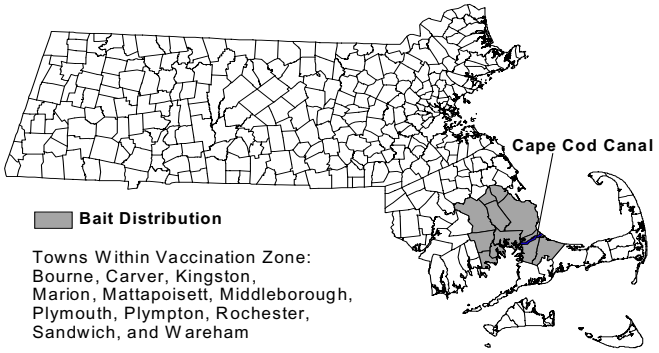
- to reduce the risk of rabies exposure for people, pets,and wildlife on the Cape; and
- to reduce the labor and cost of following up on all potential rabies exposures through the use of a vaccinnia rabies glycoprotein recombinant vaccine that is effective when taken orally by raccoons.

In addition to creating a barrier to prevent the spread of rabies, Tufts University School of Veterinary Medicine (TUSVM), in partnership with the United States Department of Agriculture, Wildlife Services and with funding by the Massachusetts Department of Public Health, has collected and analyzed information on animal distribution, surveillance, trap efficiency, vaccination rates across habitat types, seasonal influences on vaccination rates, animal distribution and relative abundance, and species differences in vaccine contact.

The CCORVP is the longest running barrier program in the United States and has served as a model for other programs around the country. September 2003 marks the 10th consecutive year of baited vaccine distribution. The barrier continues to be tested and challenged, most recently by the appearance of several confirmed rabid raccoons in the ORV zone north of the Canal. Active surveillance is ongoing in Bourne and other communities around the Canal to identify any breach in the barrier.

In the summer of 2003, 45,000 baited vaccine sachets were distributed by vehicle and helicopter over 300 square miles across 11 towns. The towns included Sandwich, Bourne, Wareham, Carver, Plymouth, Kingston, Rochester, Plympton, Marion, Mattapoisett, and Middleboro. Over 30 volunteers from federal, state, and local agencies, TUSVM, and the Senior Environmental Corps Volunteers assisted in the vaccine bait distribution. The major accomplishments of the program include keeping Cape Cod free of terrestrial rabies for ten years, reducing rabies cases in mainland towns, improving animal welfare, raising rabies awareness throughout Massachusetts, and enabling research projects that have highlighted rabies spread and identified virus jumps to skunks.

2003 Oral Rabies Vaccine Bait Distribution



Why Report Infectious Diseases?

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On-Call Epidemiologist immediately at 617-983-6800. Lists of reportable diseases are available on the web at http://www.state.ma.us/dph/cdc/bcdc.htm.

Each fall, the Division of Epidemiology and Immunization offers a comprehensive training on surveillance, reporting, and control. In addition, the Division has regional health educators to help meet the training needs of local health departments and other public health partners. For more information about this year's trainings—scheduled for November and December—or to contact the health educator in your region, call Cathy McKenna at 617-983-6856.

Lastly, MDPH can provide you with helpful infectious disease statistics. Call the Division of Epidemiology and Immunization Surveillance Program at 617-983-6801 to request data for your town or region.

Reducing Vaccine Waste, Maximizes Vaccine Funds

The most common reason for vaccine waste is due to vaccine stock not being rotated; it does not get moved forward when a new supply of vaccine is received. As a result, the vaccine that is in the rear of the refrigerator reaches its expiration date before ever being used. Since most vaccines have a shelf life of more than one year from the time you receive them, there should never be vaccines expiring before use.

Massachusetts is one of only ten states that supplies all Advisory Committee on Immunization Practices (ACIP) recommended childhood vaccines **free** to all children. Help us to sustain this program in Massachusetts by rotating your vaccine supply and reducing vaccine waste.

Need to locate a flu clinic?

Find a list of public flu clinics in Massachusetts at the following website:

http://flu.masspro.org
(Do not start this address with www.)

Or call the Massachusetts Department of Public Health at 617-983-6800 or toll-free at 888-658-2850.

For additional information on flu, pneumococcal, and other adult vaccinations, please visit:

Massachusetts Department of Public Health (DPH):
www.state.ma.us/dph

Centers for Disease Control and Prevention (CDC):
www.cdc.gov/nip

Q and A on Smallpox Vaccination

Does the end of the Iraq War mean we no longer need to plan for a potential smallpox threat?

No. The threat of possible smallpox virus possession was never limited to the former Iraqi regime. We still have no way to assess the risk of smallpox as a bioterrorist weapon. The Massachusetts plan is based on the assumption that some small, but real, threat exists and a minimal number of individuals among several professional disciplines, need to be vaccinated to respond to smallpox without significant risk to their lives.

Doesn't vaccination within 4 days of exposure to smallpox effectively prevent smallpox?

No. Many people vaccinated after smallpox exposure will still get smallpox, although most are likely get a milder case and are less likely to die from smallpox. A response plan that involves vaccination only after exposure will not reliably prevent smallpox and will not avoid the need to quarantine the exposed individuals, preventing their participation in the response effort. Post-exposure vaccination is a critical, life-saving component of disease control in the event of smallpox release, but is not sufficient preparation for responders to smallpox.

For information on smallpox vaccination or vaccination certification training, call Patti Scanlon, RN, MPH, at 617-983-6907.

Varicella Case Reporting Coming Soon

Over the last few years, the number of cases of varicella in Massachusetts has declined by 70-80% (Source: MA Behavioral Risk Factor Surveillance Survey). To gain a better understanding of the epidemiology of varicella in the post vaccine era, the Centers for Disease Control and Prevention (CDC) has recommended the use of individual case-based reporting. Individual reporting will allow for better ascertainment of cases and a greater understanding of the impact of immunization on disease morbidity and mortality, as well as help to monitor the incidence of breakthrough disease.

The Massachusetts Department of Public Health (MDPH) is planning to initiate such reporting by early 2004. MDPH, CDC, and partners within Massachusetts are participating in the development of a case report form, as well as reporting procedures. The current draft of the form includes three sections: (1) basic demographic information; (2) limited clinical information; and (3) vaccination history. Although specific procedures are still being developed, it is anticipated that providers, local boards of health and schools will all play an important role in reporting. By strengthening varicella surveillance, we can better understand and address the changing epidemiology of varicella in Massachusetts.

Reportable Diseases and Isolation and Quarantine Requirements

The Reportable Diseases and Isolation and Quarantine Requirements (105 CMR 300.000) were updated and promulgated as of February 2003. While the exclusion of susceptible, exposed health care workers has always been in the regulations, they now include a minimum period of quarantine of contacts of varicella, such that "susceptible students or staff…shall be excluded from school from the 10th through the 21st days after their last exposure."

These exclusion criteria apply to those students and staff in childcare, preschool, and grades K through 12, as well as to those in health care settings. It is not anticipated that there will be many susceptibles, as any of the following will satisfy the requirement for immunity: 1) a past history of varicella (for adults or staff, it can be self-reported), 2) serologic confirmation of immunity, or 3) appropriate vaccination. Additionally, if someone is susceptible and is exposed, vaccination post-exposure, within the appropriate time frame (within 3 to 5 days, depending on the situation), may allow a person to return to school or work immediately without any exclusion. While there is no requirement for varicella immunity for staff at childcare centers, preschools or schools, it is a prudent recommendation, as the exclusion of susceptible staff (if they are a contact of a case) could result in difficult staffing issues at the institution.

You Be The Epi

A 17 year old female presents for her periodic health examination. She has no complaints and has always been healthy. She reports being sexually active for the last 6 months, and has a new male partner for the last two months. She has been using oral contraceptives for the last year without problems. She claims to use condoms occasionally. Her physical and pelvic examinations are normal.

Should she be screened for *Chlamydia trachomatis*? Can this be done without parental consent?

Chlamydia trachomatis continues to be the most frequently reported bacterial sexually transmitted disease (STD) in Massachusetts. The rate of chlamydial infections in 2002 was 183/100,000, 9.5% higher than the 2000 rate of 167/1000. In Massachusetts, there is a serious and increasing problem with chlamydia infections among 15-19 year olds. In the year 2002, the rate among the 15 to 19 year old age group was 879/100,000, almost five times the rate for all ages.

For a variety of biological, social and behavioral reasons adolescents are at the highest risk for chlamydial infection. For young women, age and physiology make them more susceptible to infection because their cervical epithelial cells are developmentally immature. These factors, along with barriers to access and the potential for recurrent infections, result in young women bearing most of the consequences of chlamydial infections. In spite of this, most teens are still not being screened on a regular basis. In Massachusetts, less than 40% of sexually active women aged 25 or less are screened for chlamydia.

Why screen?

A full 75% of women and 50% of men with chlamydial infections are asymptomatic. Up to 40% of women with untreated chlamydial infection will develop pelvic inflammatory disease (PID). The sequelae of PID can include ectopic pregnancy, infertility, and chronic pelvic pain, often resulting in multiple surgical interventions. The occurrence of infertility increases with the number of episodes of PID, e.g., 8% after one episode, 20% after two and 40% after a third. Untreated chlamydial infections also affect newborns; up to 2/3 of neonates born to infected mothers will be colonized after delivery. Of these, up to 30% will develop pneumonia. Overall, from 30% to 50% of infants born to infected mothers will develop conjunctivitis.

Outcome research has demonstrated that screening women for *Chlamydia trachomatis* can reduce the incidence of PID by more than 50% in the course of one year. Therefore, implementing a screening strategy is crucial for the prevention of upper-genital-tract infections and as well as for the prevention of transmission to a newborn or to sexual partners. Screening is especially critical for early detection and treatment among adolescents. **Young age is the single most important predictor of chlamydial infections.**

Age-based screening recommendations for *Chlamydia trachomatis for* Sexually active women and Sexually active men

≤25 years of age	***Non-pregnant:*** Screen for chlamydia once a year. ***Pregnant:*** Screen for chlamydia in the first and third trimester.	Consider screening for chlamydia once a year.
>25 years of age	***Non-pregnant:*** Screen at least once a year if at risk. ***Pregnant:*** Screen in the first and third trimester if at risk.	Consider screening for chlamydia once a year ***if at risk***: - not using condoms correctly or consistently. - new or multiple sex partners in the last three months. - new or multiple sex partners since the last test. - infected with another STD. - prior history of STD.

US Centers for Disease Control and Prevention (CDC), the US Preventive Services Task Force (USPSTF) Routine screening of sexually active adolescent and young women is also recommended by the American Medical Association (AMA), the American College of Obstetricians and Gynecologists, the American Academy of Pediatrics, the American Academy of Family Physicians and several other primary care clinical specialty organizations.

Recent data have shown that the prevalence of asymptomatic infections in men is similar to that in women in many settings, making a compelling argument to screen males who can represent a significant source of maintenance and spread of chlamydial infection. The cycle of infection and re-infection can be broken if an independent effort to detect asymptomatic chlamydial infections in men at risk is undertaken

Confidentiality

In Massachusetts teens who have, or suspect they have, an STD may consent to diagnosis and treatment for that STD. **Furthermore, the confidentiality of records from those services is protected by Massachusetts law and parents cannot access them without the teen's consent.** (Massachusetts General Law, Ch. 112, s. 12F). (One exception would be if the provider felt that the condition of the teen was so serious as to endanger life or limb.)

The nucleic acid amplified tests (NAAT) are the most sensitive tests for the detection of *Chlamydia trachomatis.* For women for whom a pelvic examination is indicated, **the preferred test is an endocervical NAAT** because of its high sensitivity and specificity. **Use urine testing with a NAAT in the setting where a pelvic examination is not scheduled, acceptable, indicated or routinely performed.** If NAATS are not available, unamplified nucleic acid hybridization tests (DNA-probe), enzyme immunoassays (EIA) and direct fluorescent antibody tests (DFA) performed on

an endocervical specimen are acceptable, albeit less sensitive, alternatives. **For men, a urine-based NAAT is recommended**, and preferred over a urethral sample (often unacceptable to males). If this is not available, a urethral sample (if acceptable to the patient) tested with a non-NAAT (DNA-probes, EIA, DFA) or culture is acceptable. A leukocyte esterase test (LET) on the first 10-15 cc of fresh unspun urine, followed by chlamydia testing if positive, is a less sensitive alternative.

Treatment
Single-dose observed therapy of chlamydial infections with 1g of azithromycin is preferable to ensure maximum compliance in teens.

Management of the sexual partner(s):
Sexual partners of persons infected with *Chlamydia trachomatis* should be treated.

It is important to note that the public health department does not routinely provide partner services for reported chlamydia cases. Therefore, it is important that health care providers inform infected patients of the following: sex partners should be evaluated and treated if they had sexual contact with the patient during the 60 days preceding the diagnosis of chlamydia. The most recent sex partner should be evaluated and treated even if the time of the last sexual contact was more than 60 days before the diagnosis. The patient can do partner notification. The provider or state public health department personnel (disease intervention specialists upon provider request only) can also perform partner notification upon consent of the infected patient. Partners should be administratively managed in one of the three following ways:

1. The partner can be referred to his or her own primary care provider.
2. The partner can be seen by the provider giving care to the infected patient.
3. The partner can be referred to the nearest state-funded STD clinic, if the clinic is within reasonable distance.

Reporting
Cases of ***Chlamydial trachomatis*** (defined as a positive laboratory test for *Chlamydia trachomatis)* **should be reported to the Division of STD Prevention,** DPH, as should other STDs.

Resources
A chlamydia tool kit is available for clinicians. This and other educational resources are available through the Division of STD Prevention (617) 983-6940 and the STD/HIV Prevention Training Center of New England (617) 983-6945.

Save the Dates

Risk Communication Training:
November 12, 17 or 18, 2003, 8:30 AM to 4:00 PM. This one day training course is designed to give you the basic tools to communicate effectively with the general public and the media. Information on locations and registration are located online at www.indecon.com/iec_web/menu/introduction.asp or call (617) 864-0214 x306.

TB Seminar for College & University Health Services Personnel: Tuesday November 18th from 8:30 AM to 1:30 PM at the Hogan Center, College of the Holy Cross, Worcester, MA. Please call (617) 451-0049, x285 for more information.

HIV/AIDS Surveillance

Update on Trends in Mortality among Persons with AIDS in Massachusetts

Since 1995, there has been a dramatic decline in the number of deaths among people reported with AIDS. Highly active antiretroviral therapy (HAART), starting in 1996, had a dramatic effect on the survival of persons with HIV infection and AIDS.

Declines in mortality also reflect declines in AIDS incidence. The number of AIDS deaths increased each year from the beginning of the epidemic until 1994, reflecting the increase in incidence through the 1980s and early 1990s. Declines in deaths in 1996 and 1997 were considerably greater than expected based on decreased incidence. Decreases over the past several years in the number of deaths among persons with HIV and AIDS are evident in all demographic groups. Moderate *increase* in the number of deaths among persons with HIV/AIDS. The number of deaths among persons with HIV/AIDS in 2002 (262 deaths) was the lowest since 1986 (201 deaths).

The figures on the right demonstrate trends in HIV/AIDS mortality in Massachusetts. Despite overall declines in mortality among persons with HIV/AIDS, mortality rates vary among different subpopulations. Addressing disparities in care, preventing secondary transmission, and meeting the social and medical needs of persons living with HIV or AIDS remain public health challenges.

Trends in Death Among AIDS Cases in Massachusetts: By Gender

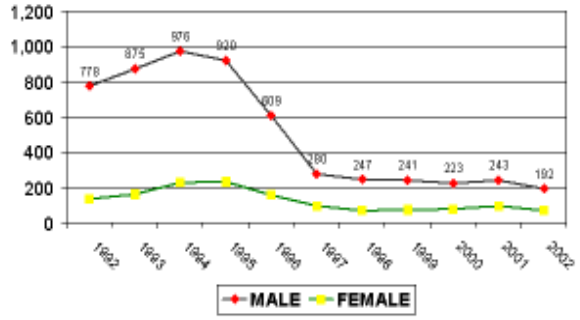

Figure 1

Trends in Deaths among AIDS Cases in Massachusetts: By Race/Ethnicity

(Numbers of cases in Asian, Pacific Islander, American Indian and Alaskan are too low to be demonstrated in this graph)

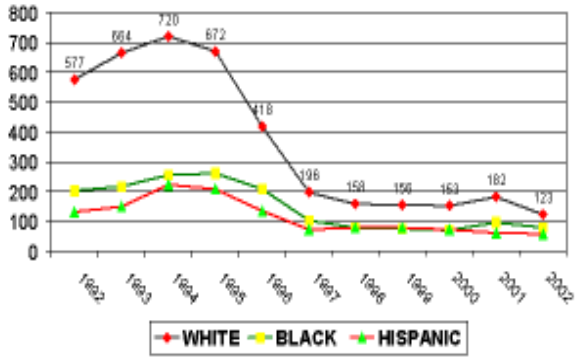

Figure 2

HIV/AIDS Among Women in Massachusetts: An Update

HIV/AIDS cases among women have constituted an increasing proportion of HIV/AIDS cases in Massachusetts. Of 61 AIDS cases diagnosed in Massachusetts in 1983, five were women. In contrast, women are 29% of all reported AIDS cases and 34% of all HIV infections diagnosed in 2002 in Massachusetts residents. As of June 1, 2003, there were 4,057 women among 14,251 people living with HIV/AIDS (PLWHA) in Massachusetts.

Women are almost one-third of new cases of HIV/AIDS diagnosed in recent years, as well as almost one-third of the people living with HIV/AIDS. Women account for 24% and 29% of PLWHA in the Boston and Metrowest Health Service Regions (HSRs), but between 36-43% of PLWHA in the Northeast, Southeast, Central and Western HSRs. Statewide, injection drug use (IDU) is the predominant mode of exposure to HIVamong women, 36% of all women living with HIV/AIDS. An additional 16.6% of women report their mode of exposure to HIV to be heterosexual sex with an injection drug user. IDU either directly or indirectly, accounts for over half of all women living with HIV/AIDS in Massachusetts.

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Trends In Deaths Among AIDS Cases In Massachusetts By Risk of HIV Exposure Years 1992 - 2002

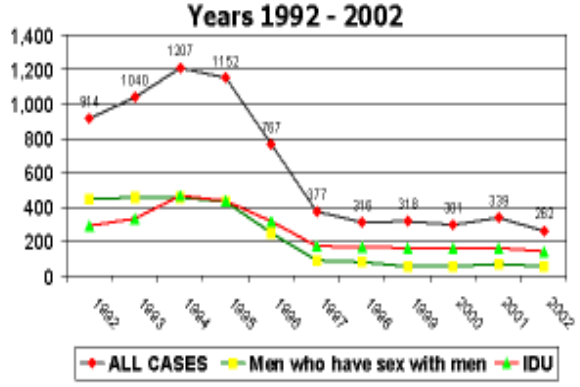

Figure 3

*Data obtained from HIV/AIDS Surveillance Program and Registry of Vital Records

Refugee and Immigrant Health

African Refugee and Immigrant HIV/AIDS Awareness Week

HIV/AIDS is one of the most widespread health problems in Africa. With over 29.4 million people infected and 3.5 million new infections in 2002, Sub-Saharan Africa is home to almost 90% the world's HIV-infected population. Limited healthcare access and information, coupled with inadequate healthcare infrastructure, exacerbate the crisis.

Since the 1980's and in increasing numbers in recent years, individuals from a number of African countries have fled persecution and civil strife, seeking safety and stability. As refugees and asylees resettle, they bring their HIV/AIDS-related perceptions, beliefs, and practices to their host countries. Despite comparatively abundant HIV/AIDS resources, lack of language and culture-specific medical services for refugees in the US can make care as inaccessible as if it did not exist.

Addressing this divide, while highlighting working models of prevention and intervention in both Africa and the US, was the main goal of African Refugee and Immigrant HIV/AIDS Awareness Week, which took place August 11-14, 2003. The Week was organized and sponsored by the Refugee & Immigrant Assistance Center (RIAC). Co-sponsors were the Massachusetts Department of Public Health (MDPH), Boston Medical Center (BMC) and the International Rescue Committee (IRC) and funding was from the US Department of Health and Human Services, Office of Refugee Resettlement (ORR). The HIV/AIDS Awareness Week brought together activists, scholars, educators, public health practitioners, Boston-area African refugee and immigrant populations, health care providers, and the public. The gatherings focused on furthering understanding of the severity of HIV/AIDS pandemic in Africa, fostering culturally competent HIV/AIDS care, emphasizing the health resources available to refugees and immigrants in Greater Boston and identifying model prevention/intervention programs that are designed and being implemented by African countries. At the Opening Ceremony, hosted by the Boston University School of Public Health (BUSPH) on August 11th, Jean Flatley McGuire, Ph.D., Director of the MDPH HIV/AIDS Bureau, Joyce Millen, Ph.D., MPH, Co-Director of the Institute for Health and Social Justice, and Muka Chikuba, MBCHB, MPH, of John Snow, Inc. outlined the current status, myths, and future prospects of the African HIV/AIDS epidemic and the challenges of providing care.

During the week, workshops and video presentations were held at health centers and African community organizations. African community workshops were tailored to best reach specific populations with different needs and were conducted in participants' languages. The community groups are planning to organize more workshops that focus on HIV/AIDS as the need and interest are both high.

Workshops for health care providers focused on African community issues and strategies to increase access to and appropriateness of care. As was true with community groups, interest from health care providers was good, although scheduling during the August week was challenging. Additional provider workshops are planned for the Fall.

A hopeful note was struck at the HIV/AIDS Awareness Week Closing Ceremony, which was also hosted by BUSPH on August 14th. Julie Kabukanyi, RN, BSN, of the African Women's Empowerment Group and Dr. Sondra Crosby spoke about access to and experiences with health care in the US from two very different perspectives – that of the refugee and that of the clinician. Andrew Fullem, of John Snow, Inc., presented on HIV/AIDS programs in Africa and included comments on comparisons with programs and approaches in the US.

The partners who hosted African Refugee and Immigrant HIV/AIDS Awareness Week will continue to provide workshops to refugees and asylees and facilitate dialog between community organizations and service providers to enrich existing services and hope to continue with an annual African Refugee and Immigrant HIV/AIDS Awareness Week to keep issues in the forefront of communities and healthcare providers.

HIV/AIDS In Women

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Heterosexual sex with an infected or at-risk partner is the present mode of exposure for 33.3% of HIV/AIDS cases among women. The mode of exposure to HIV is not known or not reported in 29% of women reported to be living with HIV/AIDS.

Different profiles in predominant mode of exposure to HIV infection are notable for women by race/ethnicity. For example, whereas IDU is the primary risk for 53% of white women, heterosexual sex predominates as the mode of exposure for black and Hispanic women (30 and 45% living with HIV/AIDS, respectively). Black women have a higher proportion of mode of exposure to HIV not known or not reported (45%). This is partly due to the fact that a sizeable proportion of these cases are among women who have immigrated from countries where heterosexual transmission predominates, but do not meet the CDC surveillance definition for heterosexual transmission because their sexual partner's HIV status or risk is not known.

Among HIV infection cases, proportion of cases among men and women in different age groups are as follows: 13- 19 years old, men 50% women 50%; 20-29, men 60% women 40%; 30-39, men 72%, women 28%; and 40-49 men 73%, women 27%.

Recommendations Against the Use of Rifampin + Pyrazinamide for treatment of Latent TB Infection (LTBI): *Revised ATS/CDC recommendations*

Following analyses of cohorts of patients in the United States who received 2 months of rifampin plus pyrazinamide (2RZ) for the treatment of and a national survey of health departments' experiences with this regimen, the American Thoracic Society (ATS) and the Centers for Disease Control and Prevention (CDC) have revised their previous recommendations for the use of 2RZ. Because of the unacceptably high incidence of severe liver injury and death that has been found to be associated with this regimen, ***2RZ is no longer recommended as routine treatment for patients with LTBI***. This revised recommendation applies to all patients with LTBI, regardless of HIV status. However, rifampin and pyrazinamide are essential components of recommended multi-drug treatment regimens for active TB disease, where the risks for morbidity and mortality from TB justify continued use of rifampin and pyrazinamide, with appropriate monitoring.

Patients with LTBI currently receiving rifampin and pyrazinamide should be re-evaluated for hepatotoxicity, and those at-risk should be considered for an alternative regimen (either 9 months isonized (INH) or 4 months of rifampin alone).

Please refer to *Morbidity and Mortality Weekly Report,* vol. 51, pp. 735 – 739, August 8, 2003, for further details at:

http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5231a4.htm

Why report Latent Tuberculosis Infection to the Department of Public Health?

Recently, reporting regulations (105 CMR 300: Reportable Diseases and Isolation and Quarantine Requirements) were amended and latent tuberculosis infection (LTBI), as indicated by a new positive tuberculin skin test or other test for TB infection (such as the QuantiFERON TB), was made a reportable condition. Questions have been raised about why this was done.

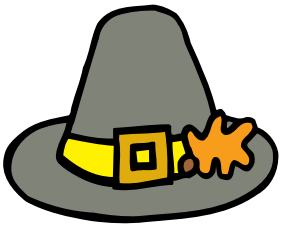
The Massachusetts TB case rate for 2002 is 4.3 per 100,000. This is the lowest incidence of TB in the history of Massachusetts. The incidence rates have been level between 4 and 5 per 100,000 for the past 7 years, after a significant decline in the early 1990s. The goal of the National Strategic Plan to Eliminate TB is to reduce the case rate to <1 per 100,000 by 2010. The interim goal for 2000 was to reduce the case rate to 3.5 per 100, 000. Case finding and treatment, with interruption of transmission has worked well, but if elimination of TB is to happen in Massachusetts, we need to take further action preventing development of active disease.

Approximately half of the active TB cases reported in the United States occur in persons born outside the country. However in Massachusetts, over three-quarters of tuberculosis cases are among non-US born persons. Another 16% of cases are in persons 65 years of age or older. Most (but certainly not all) of the foreign-born and elderly acquired their initial infection with *Mycobacterium tuberculosis* years before their active disease developed. The only way to prevent the development of TB in these individuals is to treat their LTBI and prevent progression to active disease. Molecular epidemiologic studies ("DNA fingerprinting") confirm that very little TB disease in Massachusetts is due to recent transmission.

The Centers for Disease Control and Prevention and the American Thoracic Society have recently published Targeted Tuberculin Testing and Treatment of Latent Tuberculosis Infection (MMWR 2000; 49 (No. RR-6)). The basic premise of this guideline is to test only people at risk for LTBI with the intent to treat LTBI (what was once called "preventive therapy"). The Massachusetts Department of Public Health embraces this approach, but cannot appropriately monitor adherence without an understanding of who is getting tested, who is positive and who is getting treated for LTBI.

The department understands that reporting of LTBI adds a burden on providers. The early institution of LTBI reporting provides an opportunity to develop and phase-in an efficient and user-friendly surveillance system that will be adaptable to changes in the technology of disease surveillance. Information about LTBI is going to be crucial to reducing TB morbidity in Massachusetts.

TB elimination (<1 per 100,000 cases per year) is achievable in Massachusetts. But, to achieve TB elimination, we must do the best possible job of identifying people likely to have TB infection, test them appropriately and treat them with effective therapy to prevent them from developing TB disease. Surveillance is the base upon which disease control and public health is built. Surveillance of LTBI is the base we need to build to eliminate TB from the Commonwealth.



A Tribute to Barbara McInnis

Massachusetts Tuberculosis control program and Boston's homeless community suffered a catastrophic loss in July with the sudden and unexpected passing of Barbara McInnis, R.N., in Augusta, Maine, at the age of 67. As TB Nurse at Boston's Pine Street Inn shelter since 1973, Barbara provided the link between health care and the streets for the region's most forgotten people.

Originally placed at the Inn to stem a tuberculosis outbreak in the 1970's, she quickly learned that the way to reach her clients was to listen, not preach, and to respect their life situations in a non-judgmental way. She embraced the shelter's guests, and their problems became hers - her work often extending beyond providing medical care for tuberculosis. She soon became a confidant to those who society had forgotten, and she spent much of her time advocating for them and for their needs.

She was able to grasp the basis for tuberculosis and its transmission in this population, and to design approaches to contain the disease and treat those who were ill effectively. She served as a teacher and as a role model for health professionals of all disciplines, and while the principles she helped define now are followed by many TB programs across the nation, few can replicate her style.

The trust she engendered in her patients was key to their acceptance of the long and sometimes uncomfortable and inconvenient treatment. Her willingness to listen to people and provide assistance for all kinds of problems, health-related or otherwise, and often at great personal expense, made her an icon of the homeless community. Her touch inspired many, including homeless persons, to careers in health care and in human services. As a tribute to Barbara, Boston's Health Care for the Homeless program named their medical respite unit after her in 1993, and Boston Medical Center's Homeless Outpatient Clinic is named in her honor.

Barbara died from a medical complication, following an injury she sustained in a motor vehicle accident a week earlier. Her immeasurable contributions to the lives of many of the most marginalized of people will be missed. Yet the legacy of her compassion, her selflessness, and her insight into the relationship between humanity and health care remains for those who work with the homeless, and serves as a reminder that caring forms a basis for success.

Repeal of the Massachusetts General Law, chapter 71, section 55B

The law requiring pre-employment tuberculosis screening of school personnel and volunteers (Massachusetts General Law, chapter 71, section 55B) was repealed on July 31, 2003. The repeal is found in Chapter 46 of the Acts of 2003, section 81: http://www.state.ma.us/legis/seslaw03/s1030046.htm

The decision to seek repeal of this law was based upon recommendations from the federal Centers for Disease Control and Prevention to eliminate screening activities in low-risk populations and reserve resources for targeted testing and treatment of populations identified as higher risk acquiring tuberculosis.

The Massachusetts Department of Public Health is indebted to the Massachusetts Advisory Committee for the Elimination of TB (MACET) for the role they played in supporting and promoting the repeal of the law. MACET spear headed the informational activities that explained the need to take this action. Members were tireless in their pursuit of this result.

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